

AMENDMENTS TO THE SPECIFICATION

In the Specification:

Please replace the paragraph labeled [0034] with the following rewritten paragraph [0034], changes in which are shown in mark-up:

-- [0034] Looking first at the up-link section 102 from left to right in FIG. 2A, section 102 may include an input filter 110U, which may be, for example, a radio frequency ("RF") filter, or more specifically, may be a filter tuned to pass frequencies in a predetermined frequency range, e.g., in the range of 800 to 830 MHz, although the invention is not limited in this respect. The input RF filter 110U may receive signals from an antenna, filter the frequencies outside the predefined pass range, and provide a signal representing the filter pass-range signal to a pre-filtering unit 120U, which may include a low noise amplifier ("LNA") 122U and an attenuator 124U, for example, a LNA and attenuator as are known in the art. The pre-filtering unit 120U may mix a received signal with periodic signal, e.g., a sinusoidal signal, for example, a sine or cosine wave signal of a given frequency, such that the received signal is down-converted to an intermediate frequency ("IF"). The given frequency mixed with the received signal may be determined and controlled, for example, by microprocessor 170, as described in detail below. The IF output of the pre-filtering unit 120U may enter a RF filtering unit 130U. RF filtering unit 130U may include, for example, a pre-amplifier unit 132U and a filter unit 134U. Optionally, in some exemplary embodiments of the present invention, RF filtering unit 130U may include a power monitor 136U, for example, to sample actual levels of communication traffic and provide traffic level samples to microprocessor 170. The filter unit 134U may be, for example, a Surface Acoustic Wave (SAW) filter ~~or~~ or a ceramic filter, as is known in the art, or a digital filter, such as, for example, the digital filter described in U.S. ~~patent application Ser. No. 10/175,146~~ Patent No. 6,873,823, assigned to the same assignee as the present invention, the disclosure of which is incorporated herein by reference in its entirety. --

Please replace the paragraph labeled [0042] with the following rewritten paragraph [0042], changes in which are shown in mark-up:

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-- [0042] As further shown in FIG. 2A, the down-link section 104 of bi-directional repeater 100 may virtually mirror the up-link section 102 discussed above. A difference between the up-link and down-link sections may be in that down-link section 104 may include an input RF filter 110D, a pre-filtering unit 120D, a RF filtering unit 130D, an attenuator 142D, a power amplifier unit 150D, and an output RF filter 160D, which may be tuned or adjusted to receive and pass frequencies of downlink communication channels, as opposed to passing frequencies at or around uplink communication channels, as discussed above with reference to uplink section 102. --

Please replace the paragraph labeled [0044] with the following rewritten paragraph [0044], changes in which are shown in mark-up:

-- [0044] Reference is now made to FIG. 2B, which is a block diagram of a bi-directional repeater 200 with a RF gain controller according to further exemplary embodiments of the present invention. Components of the repeater of FIG. 2B that are similar or identical to corresponding components of repeater 100 in FIG. 2A are generally designated using the same reference labels and, for the sake of brevity, the description relating to such elements is generally not repeated. An up-link section 202 of bi-directional repeater 200 in FIG. 2B includes a RF unit, 230U, which may optionally include, in some exemplary embodiments of the invention, a power monitor 236U, for example, to sample actual levels of traffic and to provide microprocessor 170 with such traffic level samples. RF unit 230U may further down convert the IF signal to digital filter 240U and may also convert the down-converted signal to a digital form using an A/D converter 242U which may be an internal component of digital filter 240U, e.g., as is known in the art. The optional A/D converter 242U may sample the IF signal and may generate a digital signal representing the sampled IF signal. The digital signal representing the IF signal may enter a digital filter bank 244U, which may include a digital filter bank as described in U.S. ~~patent application Ser. No. 10/175,146~~ Patent No. 6,873,823, assigned to the same assignee as the present invention, the disclosure of which is incorporated herein by reference in its entirety. In accordance with an exemplary embodiment of the present invention, a SAW filter (not shown) may replace A/D converter 242U, digital filter bank 244U, and D/A converter 246U, and it may be used to filter the received signal. The filtered output of the digital filter bank 244U may optionally be converted to an analog

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signal by a D/A converter 246U. The filtered output, in digital form or analog form if it was converted by D/A converter 246U, may be received by an attenuator 142U, which may attenuate the filtered signal according to control signals from microprocessor 170, as described in detail above. --

Please replace the paragraph labeled [0045] with the following rewritten paragraph [0045], changes in which are shown in mark-up:

-- [0045] As further shown in FIG. 2B, a down-link section 204 of bi-directional repeater 200 may virtually mirror the up-link section 202 discussed above. A difference between the up-link and down-link sections may be in that down-link section 204 may include an input RF filter 110D, a pre-filtering unit 120D, a RF unit 230D, a digital filter 240D, an attenuator 142D, a power amplifier unit 150D, and an output RF filter 160D, which may be tuned or adjusted to receive and pass frequencies of downlink communication channels, as opposed to passing frequencies at or around uplink communication channels, as discussed above with reference to uplink section 202. --